Claims

1) An elongate electrical conductor that is adapted for electrically connecting with an electrical contact, the conductor including:

a longitudinally extending elongate body for defining a first contact surface; and

a plurality of longitudinally spaced apart ribs that extend from the body to respective free ends that are spaced apart from the first contact surface for allowing the contact to be progressed between the body and one or more of the ribs, each rib including a respective second contact surface that is opposed with the first surface wherein, upon progression of the contact between the body and the one or more ribs, the first surface and the respective one or more second surfaces are resiliently biased into engagement with the contact.

2) An elongate electrical conductor according to claim 1 in which the spacing between the free ends and the first contact surface is greater than the spacing between the first and second contact surfaces.

3) An elongate electrical conductor according to claim 1 in which the ribs are resiliently mounted to the body.

4) An elongate electrical conductor according to claim 1 in which the ribs are resilient.

5) An elongate electrical conductor according to claim 1 in which the body is a conductive sheet having two opposite elongate longitudinally extending edges, wherein the ribs extend from one of the edges.

6) An elongate electrical conductor according to claim 5 in which the body includes a further conductive strip that extends from the other of the edges.

7) An elongate electrical conductor according to claim 6 in which the further conductive strip is used in high current applications.

8) An elongate electrical conductor according to claim 1 in which the adjacent free ends are mechanically connected to collectively increase the resilient bias.

9) An elongate electrical conductor according to claim 1 in which the adjacent free ends are mechanically connected by respective intermediate integrally formed segments.

10) An elongate electrical conductor according to claim 9 in which the segments collectively define with the free ends an engagement face for guiding the progression of the contact into biased engagement with the first and second surfaces.

11) An elongate electrical conductor according to claim 10 in which the engagement face is continuous.

12) An elongate electrical conductor according to claim 10 in which the engagement face is opposed with and inclined away from the first surface

13) An elongate electrical conductor according to claim 10 in which the engagement face extends between an inner edge and an outer edge that terminates opposite the other edge.

14) An elongate electrical conductor according to claim 13 in which when the first and second surfaces are biased into engagement with the contact, the inner edge abuts the contact.

15) An elongate electrical conductor according to claim 1 in which the ribs restrain longitudinal movement of the contact.

16) An elongate electrical conductor according to claim 1 in which the conductor is formed from a continuous conductive sheet that is folded upon itself along a longitudinal fold line.

17) An elongate electrical conductor according to claim 1 in which the sheet is punched to form the ribs.

18) An elongate electrical conductor according to claim 1 in which the sheet is cut or otherwise formed.

19) An elongate electrical conductor according to claim 1 in which the first contact surface is substantially planar and the second contact surfaces are arcuate.

20) An elongate electrical conductor according to claim 1 in which the second contact surfaces include a compound arc.

21) An elongate electrical conductor that is adapted for electrically connecting with an electrical contact, the conductor including:

a longitudinally extending elongate first body for defining a substantially planar contact surface; and

a longitudinally extending elongate second body being mounted to the first body for defining an arcuate contact surface that is opposed with the planar surface wherein,

upon progression of the contact between the first and second bodies, the planar and the arcuate surfaces are resiliently biased into engagement with the contact.

22) An elongate electrical conductor according to claim 21 in which the arcuate contact surface is segmented.

23) An elongate electrical conductor according to claim 21 in which the second body includes a plurality of longitudinally spaced apart ribs that extend from the first body to respective free ends which collectively define the arcuate surface.

24) An elongate electrical conductor according to claim 23 in which the free ends are mechanically connected.

25) An elongate electrical conductor according to claim 21 in which the free ends are mechanically interconnected by respective intermediate integrally formed segments.

26) An elongate electrical conductor according to claim 21 in which the first body is substantially planar and includes two opposite faces, one of which defines the planar contact surface.

27) An elongate electrical conductor according to claim 21 in which the second body is arcuate and includes opposite convex and a concave faces, the formed defining the arcuate contact surface.

28) A conduit for an elongate electrical conductor that is adapted for electrically connecting with an electrical contact, the conduit including:

a longitudinally extending housing;

one or more mounting formations disposed within the housing for captively retaining the conductor to the housing;

an opening in the housing for receiving the contact and thereby allowing the contact to be brought into engagement with the conductor; and

a closure that is mounted to the housing for moving between an open configuration and a closed configuration with respect to the opening when the contact is and is not received within the opening respectively.

29) A conduit for an elongate electrical conductor according to claim 28 in which the closure is mounted to the housing for rotation between the open and closed configurations.

30) A conduit for an elongate electrical conductor according to claim 28 in which the closure is hinged to the housing.

31) A conduit for an elongate electrical conductor according to claim 28 in which the closure is resiliently biased toward the closed configuration.

32) A conduit for an elongate electrical conductor according to claim 28 in which the closure is resiliently biased toward the closed configuration by an internally disposed biasing means or spring.

33) A conduit for an elongate electrical conductor according to claim 28 in which the closure includes a longitudinal line of weakness about which it is resiliently deformed from the closed configuration.

34) A conduit for an elongate electrical conductor according to claim 28 in which the contact is part of a contact assembly and, as the assembly is progressed into the opening, the closure is moved toward to open configuration.

35) A conduit for an elongate electrical conductor according to claim 34 in which the contact assembly engages the closure to effect progression toward the open configuration.

36) A conduit for an elongate electrical conductor according to claim 28 in which the mounting formation is a retaining channel that extends continuously through the housing.

37) A conduit for an elongate electrical conductor according to claim 28 in which the channel includes a continuous open end for receiving the contact.

38) A conduit for an elongate electrical conductor according to claim 37 in which the open end is downwardly facing.

39) A conduit for an elongate electrical conductor according to claim 37 in which the open end defines the bottom of the channel.

40) A conduit for an elongate electrical conductor according to claim 28 in which the housing includes a plurality of spaced apart channels for captively retaining respective conductors.

41) A conduit for an elongate electrical conductor according to claim 40 in which the channels are parallel.

42) A conduit for an elongate electrical conductor according to claim 40 in which the channels longitudinally coextend and are transversely spaced apart.

43) A conduit for an elongate electrical conductor according to claim 28 in which the housing is extruded.

44) A conduit for an elongate electrical conductor according to claim 28 in which the closure, in the closed configuration, extends across the opening.

45) A conduit for an elongate electrical conductor according to claim 28 in which the opening extends longitudinally and the conduit includes a plurality of closures that, in the closed configuration, collectively extend longitudinally across substantially all of the opening.

46) A conduit for an elongate electrical conductor according to claim 28 in which movement of one closure between the open and closed configuration occurs independently of movement of any other of the closures.

47) A conduit for an elongate electrical conductor according to claim 28 in which the closures are modular.

48) A conduit for an elongate electrical conductor according to claim 28 in which the closures are formed from an elongate strip and interposed with longitudinally running slots.

49) A conduit for an elongate electrical conductor according to claim 28 in which the housing includes a channel on its rear face for use with adhesive tape for fixing the housing to a carrying surface.

50) A conduit for an elongate electrical conductor according to claim 28 in which the housing includes an internal cavity for housing the head of a fixing means for fixing the housing to a carrying surface.

51) A conduit for an elongate electrical conductor according to claim 28 in which the closure is mounted inside the housing and, in the closed configuration, extends upwardly from the housing and across the opening.

52) A conduit for an elongate electrical conductor according to claim 28 in which the closure is hinged at or adjacent to the housing wherein the movement between the open and closed configurations occurs within the housing.

53) A conduit for an elongate electrical conductor according to claim 28 in which the opening includes two opposite edges and the closure extends from a mounting end that is hingedly engaged with the housing adjacent to one of the opposite edges, to a free end that, in the closed configuration, is disposed adjacent to the other of the opposite edges.

54) A conduit for an elongate electrical conductor according to claim 28 in which the mounting formation includes a locating formation for orientating the conductor for resilient deformation upon engagement with the contact.

55) A conduit for an elongate electrical conductor according to claim 54 in which the conductor includes a plurality of engagement faces for engaging with the contact, and the locating formation orientates the engagement faces for resiliently deforming into engagement with the contact.

56) A conduit for an elongate electrical conductor according to claim 54 in which the locating formation is a protrusion that extends from the mounting formation.

57) A conduit for an elongate electrical conductor according to claim 28 in which the mounting formation includes a channel having an open end defined by the opening.

58) A conduit for an elongate electrical conductor according to claim 28 in which the opening is downwardly facing.

59) A conduit for an elongate electrical conductor according to claim 28 in which the closure is a flap that, in the closed configuration, extends across substantially all of the opening and which is resiliently deformed by the contact into the open configuration.

60) A conduit for an elongate electrical conductor having two opposed engagement elements that are adapted for electrically connecting with an electrical contact, one of the elements being substantially planar and the other being arcuate, the conduit including:

a longitudinally extending housing;

one or more mounting formations disposed within the housing for captively retaining the conductor to the housing;

an opening in the housing for receiving the contact and thereby allowing the contact to be brought into engagement with the conductor; and

one or more locating formations associated with the mounting formations for orientating the conductor to ensure that the substantially planar engagement face is inclined with respect to the contact.

61) A conduit for an elongate electrical conductor according to claim 60 in which the conduit includes a closure that is mounted to the housing for moving between an open configuration and a closed configuration with respect to the opening when the contact is and is not received within the opening.

62) A conduit for an elongate electrical conductor according to claim 60 in which the arcuate engagement face includes a compound arc.

63) A conduit for an elongate electrical conductor according to claim 60 in which the mounting formations captively retain the conductor within the housing.

64) A conduit for an elongate electrical conductor according to claim 60 in which the conductor is partially or substantively disposed outside of the housing.

65) A conduit for an elongate electrical conductor according to claim 60 arranged to carry three or more elongate electrical conductors to provide a plurality of circuits.

66) A conduit for an elongate electrical conductor that is adapted for electrically connecting with an electrical contact, the conduit including:

a longitudinally extending housing;

an open ended channel disposed within the housing for captively retaining the conductor within the housing;

an opening in the housing for receiving the contact and thereby allowing the contact to be brought into engagement with the conductor; and

a closure that is disposed within the housing adjacent to the open ended channel for moving between a closed configuration and an open configuration for providing a barrier to unintended access to the conductor.

67) A conduit for an elongate electrical conductor according to claim 66 in which the closure is moved into the open configuration when the contact is brought into engagement with the conductor.

68) A conduit for an elongate electrical conductor according to claim 66 in which only that portion of the closure adjacent to the contact is moved into the open configuration.

69) A contact assembly for electrically connecting with a plurality of conductors contained within a conduit, the contact including:

a housing that is movable into engagement with the conduit; and

a plurality of contact formations mounted to the housing and which are movable into engagement with respective conductors in a predetermined sequence.

70) A contact assembly according to claim 69 in which the housing is movable into releasable engagement with the conduit and the contact formations are movable into releasable engagement with the respective conductors.

71) A contact assembly according to claim 69 in which the contact formations include at least two pins, wherein one of the pins protrudes further from the housing than the other.

72) A contact assembly according to claim 69 in which the contact formations include three parallel pins that extend transversely from the housing and terminate at free ends that are transversely spaced apart.

73) A contact assembly according to claim 69 in which including at least two parallel pins and the relative transverse offset between the pins and the respective conductors is such as to provide the predetermined sequence.

74) A contact assembly according to claim 73 including an active pin and a neutral pin, and the predetermined sequence comprises the neutral pin and then the active pin engaging the respective conductors.

75) A contact assembly according to claim 73 including an active pin, a neutral pin and an earth pin, and the predetermined sequence comprises the earth pin and then the neutral pin and the active pin engaging the respective conductors.

76) A contact assembly according to claim 73 in which the neutral pin and the active pin substantially simultaneously engage with respective conductors.

77) A contact assembly according to claim 73 in which the predetermined sequence comprises the earth pin and then the neutral pin and then the active pin engaging the respective conductors.

78) A contact assembly according to claim 73 in which the pins are movable out of engagement with the respective conductors, that movement occurring in the reverse of the predetermined sequence.

79) A contact assembly according to claim 73 in which the pins are biased to move out of engagement with the respective conductors.

80) A contact assembly according to claim 73 further comprising a cam arranged to bias the pins into engagement with the respective conductors.

81) A contact assembly according to claim 73 in which the pins are provided with connectors for connecting to respective cables for conducting power or signals to or from the conductors.

82) A contact assembly according to claim 73 in which the pins are integrally formed with the housing and respective cables for conducting power or signals to or from the conductors.

83) A contact assembly according to claim 73 in which the pins are connected to respective socket formations for conducting power or signals to or from the conductors.

84) A contact assembly according to claim 73 in which the pins are provided in the reverse order to enable the contact assembly to be brought into engagement with the conductors from an alternative direction.

85) A contact assembly according to claim 73 in which the pins are arranged for engagement with a sub-set of the conductors in the conduit.

86) A contact assembly according to claim 73 in which the housing is provided with means to indicate to a user that the contact assembly is in engagement with the respective conductors.

87) A contact assembly according to claim 73 in which the guide provides a visual indication to the user.

88) A contact assembly according to claim 73 in which the housing includes a visually distinct portion, and the guide includes a window through which the user is able to view the portion when the contact assembly is in engagement with the respective conductors.

89) An elongate electrical conductor that is adapted for electrically connecting with an electrical contact, the conductor including:

a longitudinally extending elongate conductive sheet having a first face and a second face opposite to the first face, wherein the first face defines a first contact surface; and

a plurality of longitudinally spaced apart ribs that extend transversely from the sheet and back along at least a portion of the first contact surface but not along the second face, each rib including a respective second contact surface wherein, upon progression of the contact between the sheet and the one or more ribs, the first surface and the respective one or more second surfaces are resiliently biased into engagement with the contact.

90) An elongate electrical conductor according to claim 89 in which the faces are joined along a first common longitudinal edge and a second common longitudinal edge and the ribs extend from the first edge and terminate in respective free ends.

91) An elongate electrical conductor according to claim 90 in which the second contact surfaces are disposed intermediate the first edge and the respective free ends.

92) An elongate electrical conductor according to claim 90 in which the free ends terminate between the first and second edges.

93) An elongate electrical conductor according to claim 90 in which the free ends extend beyond the second edge.

94) An elongate electrical conductor according to claim 90 in which the free ends do not extend around the second edge.

95) A contact assembly for electrically connecting with a plurality of conductors contained within a conduit, the contact including:

a housing that is movable into engagement with the conduit;

a plurality of contact formations mounted to the housing and which are movable into engagement with respective conductors; and

a guide that is mounted to the housing and which provides an external indication that the contact formations are in engagement with the respective conductors.

96) A contact assembly according to claim 95 in which the housing includes a visually distinct portion, and the guide includes a window that overlies and through which the portion is viewable when the contact formations are in engagement with the respective conductors.

97) A contact assembly according to claim 96 in which the portion is otherwise substantially obscured from view.